Attitudes

Despite America's low performance relative to selected countries, American students are more confident in their ability to learn math, and value math skills more, than their Asian peers.

Note: Chart Sources listed on pages 34 and 35.
Chart 36. Percent of American 4th Grade Students Who Have High Self-Confidence in Math Compared to Selected Asian Countries: 2003

Despite their lower international scores, U.S. grade 4 students have higher self-confidence in their mathematics ability than grade 4 students in higher performing Asian countries.

Chart 37. Percent of 8th Grade American Students Who Have High Self-Confidence in Math Compared to Selected Asian Countries: 2003

Although self-confidence in mathematics among grade 8 students is uniformly lower than for grade 4 students, U.S. students continue to show greater self-confidence than students in higher performing Asian countries.

Note: Chart Sources listed on pages 34 and 35.
Although students in developed Asian countries perform relatively well in mathematics, U.S. students are the ones most likely to value mathematics except for Singapore.

Despite widely publicized predictions about the role math and science will play in the economy of the future, only one quarter of American students say lack of emphasis on math and science is a problem at their school and 40% would be unhappy with a career focusing on math and science.
Over the last ten years, relatively fewer parents believe their children are not getting enough math and science in school.

In 2005, almost 3 in 5 parents thought that the amount of math and science their children are getting in school is about right.
Achievement

National
Chart 1. 4th Grade NAEP Math Achievement by Proficiency Level: 1990-2005. NAEP
Chart 2. 4th Grade NAEP Math Achievement by Subgroup: 1990-2005. NAEP
Chart 3. 8th Grade NAEP Math Achievement by Proficiency Level: 1990-2005. NAEP
Chart 4. 8th Grade NAEP Math Achievement by Subgroup: 1990-2005. NAEP
Chart 5. 12th Grade NAEP Math Achievement by Proficiency Level: 1990-2000. NAEP
Chart 6. 12th Grade NAEP Math Achievement by Subgroup: 1990-2000. NAEP
Chart 7. 4th Grade NAEP Scatter Plot of State Math Achievement Scores vs. Percent Lunch Eligible: 2005. NAEP
Chart 8. 8th Grade NAEP Scatter Plot of State Math Achievement Scores vs. Percent Lunch Eligible: 2005. NAEP

International
Chart 9. 4th Grade TIMSS Results: 2003. TIMSS
Chart 10. 8th Grade TIMSS Results: 2003. TIMSS
Chart 11. 4th Grade TIMSS Math Achievement in the U.S. and in Selected Asian Countries: 2003. TIMSS
Chart 12. Percent of 4th Grade Students Achieving at Advanced Levels in TIMSS Math in the U.S. and in Selected Asian Countries: 2003. TIMSS
Chart 13. 8th Grade TIMSS Math Achievement by the U.S. and in Selected Asian Countries: 2003. TIMSS
Chart 14. Percent of 8th Grade Students Achieving at Advanced Levels in TIMSS Math in the U.S. and in Selected Asian Countries: 2003. TIMSS
Chart 15. Relative Strengths and Weaknesses in American 4th Grade TIMSS Math Content Areas Compared to Selected Asian Countries: 2003. TIMSS
Chart 16. Relative Strengths and Weaknesses in American 8th Grade TIMSS Math Content Areas Compared to Selected Asian Countries: 2003. TIMSS

Instruction
National
Chart 17. Number of Math Units Required for High School Graduation: 2006 to 2011. ECS
Chart 20. Percent of Students Who Took Calculus by Age 17 by Race/Ethnicity: 1990 to 2004. NAEP
Chart 23. Freshman Enrolled in Remedial Math Course by Intitutional Type: 2000. NCES

Note: Chart Sources listed on pages 34 and 35.